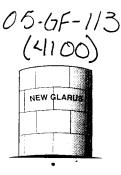


Serving the Village since 1902

### **New Glarus Light & Water**

P.O. Box 399 • New Glarus, WI 53574 In the Village Hall on 2nd St. Phone (608) 527-2913 Fax (608) 527-6630



January 29, 2003

Mr. Scot Cullen, Chief Electric Engineer Public Service Commission 610 N. Whitney Way P.O. Box 7854 Madison, WI 53707-7854

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and

Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of New Glarus Light & Water Works's report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Very truly yours,

Kari Peterson Office Manager

Enclosures

RECEIVED

JAN 3 @ 2003

Electric Division



# TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

#### **NEW GLARUS LIGHT & WATER WORKS**

FILING DEADLINE FEBRUARY 1, 2003

January 29, 2003

Kari Peterson 319 2<sup>nd</sup> Street New Glarus, WI 53574 608-527-2913

nglw2913@admin.vil.new-glarus.wi.us

RECEIVED

JAN 1 TANK

Electric Division

This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

# I Reporting Requirements: PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

## **II** Inspection Schedule and Methods:

SCHEDULE:	MONTHLY	ANNUAL	EVERY 5 YEARS
Transmission ( 69Kv)		X	X
Substations	X	X	
Distribution (OH & UG)			X

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

- 1. <u>IR</u> infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
- 2. <u>RFI</u> Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
- 3. <u>SI</u> structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
- 4. <u>Clearance</u> refers to proper spacing of conductors from other objects, trees and conductors.
- 5. <u>EC</u> equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

## **III Condition Rating Criteria**

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

- 0) Good condition
- 1) Good condition but aging
- 2) Non-critical maintenance required normally repair within 12 months
- 3) Priority maintenance required normally repair within 90 days
- 4) Urgent maintenance required report immediately to the utility and repair normally within 1 week

#### IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule.

#### V Record Keeping

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

## VI Reporting Requirements

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

# VII Inspected Circuits and Facilities

Circuit # and description	Substation
Hwy 69 Railroad Street	Railroad Street
4 <sup>th</sup> Aveneue	

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation. Emergency generation is test run and maintained every month to confirm its operational readiness.

# VIII Scheduling Goals Established and Success of Meeting the Criteria:

It is the goal of the utility to complete monthly substation inspections and inspect 50% of the distribution line and to take corrective action as necessary. All of the inspection goals were met or exceeded. An independent electrical engineer inspected 100 % if the distribution system. A strategy to upgrade the entire distribution system was developed. The distribution line serving the New Glarus Industrial Park was converted to a higher voltage and work is continuing on upgrading approximately 50% of the remaining distribution lines.

# IX Facility condition - rating criteria:

During the past two years, the main transformer and cutouts in the substation were upgraded and replaced. The utility is presently taking the first steps to convert the distribution system to a higher voltage. The didtribution line serving the Industrial Park was upgraded in early 2002. Approximately 50% of the remaining distribution line is scheduled to be upgraded by the end of 2003. After completion of the 2003 project, the utility will further assess priorities within the distribution system. The remaining portion of the distribution line is in "good"—"fair" condition. Storm related outages have been minimal during the past two years.